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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/765,605

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EXAMINER

JOSEPH, TONYA S

ART UNIT

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3628

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/765,605	Applicant(s) VAABEN ET AL.	
	Examiner TONYA JOSEPH	Art Unit 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 45-52 in the reply filed on 10/15/2009 is acknowledged.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/02/2009 has been entered.

Status of Claims

All prior claims have been cancelled. Claims 45-52 have been added and are presented for examination.

Response to Arguments

3. Applicant's arguments filed 07/02/2009 have been fully considered but they are not persuasive.

4. Applicant argues with respect to claim 45 that Slivka does not teach the newly added claim limitations. The Examiner disagrees. Slivka plainly teaches

Following an airline flight disruption (e.g., operational disruption), an airline entity, travel agent, or other travel based entities, may determine to re-accommodate disrupted passengers. Accordingly, re-accommodation driver 111 may load disrupted flight specification information from configuration file 112, which is

updated automatically to reflect the change in travel services based on the disruption (Step 205). Re-accommodation driver 111 may retrieve **flight schedule information from operations database 118** (Step 210). Also, re-accommodation driver 111 may retrieve from operations database 118 **seat availability information associated with each flight** included in the flight schedule information (Step 215). Further, re-accommodation driver 111 may **retrieve a Passenger Name Record (PNR) list associated with the disrupted flight** from a PNR data structure that may be located in operations database 118 or another storage device. (Step 220). For example, the PNR data structure may be located in a database remote from operations database 118.

The associated re-accommodation driver is not explicitly referred to as distinct "engines", however identity of terminology in a prior art reference is not a requirement for obviousness under §103. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). The re-accommodation driver and the associated elements still perform the functions of Applicant's "engines" as recited in the independent claims and accordingly the rejections are maintained.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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6. Claims 45-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. Claims 45-52 are directed to a "method" and therefore are considered process claims for the purposes of § 101. To qualify as statutory subject matter, a claimed process must either: (1) be tied to a particular machine or apparatus or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). Thus, to qualify as patent eligible, these processes should positively recite the other statutory class to which it is tied (e.g., by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g., by identifying the product or material that is changed to a different state). Claims 45-52 identify neither the apparatus performing the recited steps nor any transformation of underlying materials, and accordingly are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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10. The term "information helpful" in claim 51 is a relative term which renders the claim indefinite. The term "information helpful" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For Examination purposes, the Examiner is interpreting information as meeting the limitations of the claim.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 45-48 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1 in view of Yu U.S. Patent No. 6,314,361 B1 in further view of Official Notice.

13. As per claim 45, Slivka teaches providing scheduling information for the at least one affected mobile platform and for other mobile platforms to an integration engine (see para. 36); using the integration engine and the scheduling information to generate a disruption specification based upon an event (see para. 36), the disruption specification including data identifying passengers and crew members needing to be rescheduled from travel on an initial mobile platform, and penalty cost information relating to available actions

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that may be taken to recover from the disruption and to rebook passengers on an alternative itinerary (see para. 36 and claim 13);

using at least two of:

a fleet engine to obtain information from the integration engine regarding the disruption specification, and to generate information relating to alternative mobile platforms that are available for use in connection with a new itinerary (see para. 36, the Examiner is interpreting the re-accommodation driver to be the fleet and passenger engine);

a crew engine to obtain information from the integration engine regarding the disruption specification, and generate information relating to constraints for crew members scheduled to travel on the initial mobile platform;

and a passenger engine to generate information relating to constraints affecting passengers scheduled for travel on the initial mobile platform (see para. 36); and wherein at least one of the fleet engine, the crew engine and the passenger engine generate rescheduling solutions for a group comprising one of the passengers or the crew members.

Slivka does not explicitly teach the limitation taught by Yu the disruption specification including data identifying crew members (see Col. 8 lines 1-12). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Slivka to include the teachings of Yu to provide re-accommodation options for all subjects aboard a disrupted mobile platform. While Slivka does not explicitly disclose that the above steps are done simultaneously in parallel, there is nothing the method as performed by Slivka that would preclude the flight and passenger

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information being obtained simultaneously and in parallel. The decision to perform the steps simultaneously and in parallel is a mere design choice and does not render the claim unobvious *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice). The re-accommodation driver is not explicitly referred to as distinct "engines", however identity of terminology in a prior art reference is not a requirement for anticipation under § 102 or obviousness under §103. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

14. As per Claim 46, Slivka in view of Yu teaches the method of claim 45 as described above. Slivka further teaches using the integration engine to obtain the information generated by one or more of the fleet engine, the crew engine and the passenger engine, and to use the obtained information to determine potential rescheduling solutions acceptable for the passengers (see para. 36 and 47). Yu teaches rescheduling solutions for crew members (see Col. 8 lines 1-12). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Slivka to include the teachings of Yu to provide re-accommodation options for all subjects aboard a disrupted mobile platform.

15. As per Claim 47, Slivka in view of Yu teaches the method of claim 45 as described above. Slivka further teaches using each of the re-accommodation driver to generate information to be considered by the integration engine (see para. 36). Although Slivka does not teach separate engines, the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*,

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274 F.2d 669, 124 USPQ 378 (CCPA 1960) Yu teaches using a crew engine to generate information (see Col. 8 lines 1-12). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Slivka to include the teachings of Yu to provide re-accommodation options for all subjects aboard a disrupted mobile platform.

16. As per 48, Slivka in view of Yu teaches the method of claim 48 as described above. Slivka further teaches wherein the integration engine creates the disruption specification using: a time frame within which the rescheduling solutions are to be carried out, the time frame comprising midnight of the day that the scheduling disruption occurs (see para. 52); and resources including identifying one or more mobile platforms that have been affected by the scheduling disruption (see para. 36).

17. As per Claim 50, Slivka in view of Yu teach the method of claim 45 as described above. Slivka further teaches wherein:

the engine operates to generate initial information related to at least one of:

connection constraints for the crew members;

a cancellation penalty cost value (see para. 23 and claim 13); and

crew member limitations involving at least latest crew departure times that may be permitted under rules or laws governing work of crew members on the mobile platform;

and

wherein the engine generates information related to at least one of:

available standby mobile platforms;

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cancellation penalties (see para. 23 and claim 13); and

a preferred latest departure time of any one or more mobile platforms affected by the scheduling disruption.

The re-accommodation driver is not explicitly referred to as distinct "engines", however identity of terminology in a prior art reference is not a requirement for anticipation under § 102 or obviousness under §103. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

18. As per Claim 51, Slivka in view of Yu teach the method of claim 45 as described above. Slivka further teaches wherein:

wherein the passenger engine operates to generate the information helpful for generating potential rescheduling solutions by creating a plurality of subproblems (see para. 7), with each said subproblem defining a set of all passengers that are displaced from the same segment of travel of the initial itinerary (see para. 7 and 46); wherein the passenger engine applies a first algorithm to the subproblems, where the first algorithm is constrained to the initial itinerary for each passenger in each said subproblem, to generate alternative itineraries for a first subset of all of the passengers (see para. 14 and 34), and further identifying those passengers excluded from the first subset that have been deemed to be unsuitably rescheduled through the use of the first algorithm (see para. 46 and 47); and further comprising using a second algorithm that is not constrained to the initial itinerary, for those said passengers defining a second subset of all the passengers, that were deemed to be unsuitably rescheduled through the

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rescheduling solutions generated by the first algorithm, to generate additional rescheduling solutions for the second subset of passengers (see para. 47 and 51).

19. As per Claim 52, Slivka teaches providing scheduling information for the at least one affected mobile platform and for other mobile platforms to an integration engine (see para. 36); using the integration engine and the scheduling information to generate a disruption specification based upon an event (see para. 36), the disruption specification including data identifying passengers needing to be rescheduled from travel on an initial mobile platform, and penalty cost information relating to available actions that may be taken to recover from the disruption and to rebook passengers on an alternative itinerary (see para. 36 and claim 13);

simultaneously in parallel, using at least two of:

a fleet engine to obtain information from the integration engine regarding the disruption specification, and to generate information relating to alternative mobile platforms that are available for use in connection with a new itinerary (see para. 36, the Examiner is interpreting the re-accommodation driver to be the fleet and passenger engine);

a crew engine to obtain information from the integration engine regarding the disruption specification, and generate information relating to constraints for crew members scheduled to travel on the initial mobile platform; and

a passenger engine to generate information relating to constraints affecting passengers scheduled for travel on the initial mobile platform (see para. 36);

and using the integration engine to obtain the information generated by one or more of the fleet engine, the crew engine and the passenger engine, and to use the obtained

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information to determine potential rescheduling solutions for both the passengers and the crew members (see para. 36); and wherein the potential rescheduling solutions at are presented in:

a first subset of the passengers that have rescheduling solutions that are deemed to be acceptable (see para. 7 and 46); and a second subset of the passengers not included in the first subset that are deemed to be unacceptably rescheduled (see para. 46 and 47).

Slivka does not explicitly teach the limitation taught by Yu the disruption specification including data identifying crew members (see Col. 8 lines 1-12). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Slivka to include the teachings of Yu to provide re-accommodation options for all subjects aboard a disrupted mobile platform. While Slivka does not explicitly disclose that the above steps are done simultaneously in parallel, there is nothing the method as performed by Slivka that would preclude the flight and passenger information being obtained simultaneously and in parallel. The decision to perform the steps simultaneously and in parallel is a mere design choice and does not render the claim unobvious *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice). The re-accommodation driver is not explicitly referred to as distinct "engines", however identity of terminology in a prior art reference is not a requirement for anticipation under § 102 or obviousness under §103. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

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20. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1 in view of Yu U.S. Patent No. 6,314,361 B1 in further view of Official Notice.

21. As per Claim 49, Slivka in view of Yu teaches the method of claim 45 as described above. Slivka further teaches wherein one or more of the fleet engine, the crew engine and the passenger engine evaluate feasibility and penalty cost information in generating the potential rescheduling solutions (see para. 50 and claim 13). Slivka does not explicitly teach evaluating the legality in generating a potential solution. Official Notice is taken that considering legality in generating a potential solution is old and well known in the art of travel systems). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the methods of Slivka and Yu to include the teachings of Official Notice to be ensure compliance with FAA rules.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONYA JOSEPH whose telephone number is (571)270-1361. The examiner can normally be reached on Mon-Fri, 7:30 am-5:00pm First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571 272 0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN W HAYES/

Supervisory Patent Examiner, Art Unit 3628